## WHAT IS CLAIMED IS:

- 1 1. An animal electronic data collecting device
- 2 comprising:
- 3 a radio transmitter;
- 4 a radio receiver;
- 5 memory for storing information including a first
- 6 identifier associated with said device; and
- 7 a processor for controlling the operation of said
- 8 device, wherein said processor is arranged to transmit
- 9 a signal, by means of said radio transmitter, and to
- 10 receive, by means of said radio receiver, one or more
- 11 signals, each representing a second identifier from
- other devices, said processor being arranged to store
- in said memory each second identifier;
- wherein the default operating condition of said
- device is for said radio receiver to be in a receive
- 16 condition and, upon receipt of a wakeup call, said
- 17 processor is arranged to place said radio transmitter
- 18 into a transmit condition.
  - 1 2. A device as defined in Claim 1, wherein said
  - 2 processor is further arranged to periodically place
  - 3 said radio transmitter into a transmit condition to
  - cause said radio transmitter to transmit said first
  - 5 identifier.
  - 1 3. A device as defined in Claim 2, wherein said time
  - 2 interval between periodic transmission is a function
  - 3 of the time since the last receipt of a second
  - 4 identifier.
  - 1 4. A device as defined in Claim 1, wherein, upon
  - 2 receipt of a wakeup call, said processor is arranged
  - 3 to place said radio transmitter into a transmit

MW/1163838 -31-

- 4 condition when said wakeup call includes a second
- 5 identifier that is not already stored in said memory
- 6 of said device.
- 1 5. A device as defined in Claim 1, wherein said
- 2 device is further arranged to send data from said
- 3 memory to a remote device in response to a specific
- 4 request from said remote device.
- 1 6. A device as defined in Claim 1, wherein said
- 2 device is arranged to store a received second
- 3 identifier in a first part of said memory and to store
- 4 said received identifier in a second part of said
- 5 memory at a time determined by the time elapsed since
- 6 the receipt of said second identifier.
- 1 7. A device as defined in Claim 6, wherein said
- 2 device is further arranged to send data from said
- 3 first and/or second parts of said memory to a remote
- 4 device in response to a specific request from said
- 5 remote device.
- 1 8. A method of gathering data on animals and/or
- 2 animal products, said method comprising;
- 3 receiving at the device one or more signals, each
- 4 representing a second identifier from other devices;
- 5 storing in memory a received second identifier;
- 6 and
- 7 transmitting a signal from said device including
- 8 a first identifier associated with said device;
- 9 wherein the default operating condition of said device
- 10 is for said device to be in a condition to receive
- 11 signals and, on receipt of a wakeup call, said device
- is placed into a condition to transmit signals.

MW/1163838 -32-

- 9. A method as defined in Claim 8, further arranged
- 2 to periodically place said radio transmitter into a
- 3 transmit condition and to transmit said first
- 4 identifier.
- 1 10. A method as defined in Claim 9, wherein the time
- 2 interval between periodic transmission is a function
- 3 of the time since the last receipt of a second
- 4 identifier.
- 1 11. A method as defined in Claim 8, wherein, upon
- 2 receipt of a wakeup call, said device is placed into a
- 3 condition to transmit signals when said wakeup call
- 4 includes a second identifier that is not already
- 5 stored in said memory of said device.
- 1 12. A method as defined in Claim 8, further
- 2 comprising:
- 3 sending data from said memory to a remote device
- 4 in response to a specific request from said remote
- 5 device.
- 1 13. A method as claimed in defined in Claim 8,
- 2 further comprising:
- 3 storing a received second identifier in a first
- 4 part of said memory and storing said received
- 5 identifier in a second part of said memory at a time
- 6 determined by the time elapsed since the receipt of
- 7 said second identifier.
- 1 14. A method as defined in Claim 13, further
- 2 comprising:

MW/1163838 -33 -

- sending data from said first and/or second parts of said memory to a remote device in response to a specific request from said remote device.
- 1 15. An animal electronic data collecting device
  2 comprising:
- 3 a radio transmitter;
- 4 a radio receiver;

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- memory for storing information including a unique first identifier associated with said device; and
- a processor operatively connected to said radio 7 transmitter to cause the transmission of radio signals 8 therefrom, said processor also being operatively 9 connected to said radio receiver to obtain radio 10 signals from any other device which are received by 11 said radio receiver, said radio signals received from 12 each said other device representing a unique second 13 identifier from each said other device, said processor 14 being operatively connected to said memory to store in 15 said memory each unique second identifier received 16
- 17 from said at least one other device;
- 18 wherein said processor will, upon the occurrence of a
- 19 wakeup signal, cause said radio transmitter to
- 20 transmit radio signals from said device representing
- 21 said unique first identifier from said device.
  - 1 16. A device as defined in Claim 15, wherein said
  - 2 wakeup signal is generated periodically by said
  - 3 processor to cause said radio transmitter to
  - 4 periodically transmit radio signals from said device
  - 5 representing said unique first identifier from said

6 device.

MW/1163838 -34-

- 1 17. A device as defined in Claim 16, wherein said
- 2 wakeup signal is also generated by said processor
- 3 following the receipt of radio signals from any other
- 4 device which are received by said radio receiver.
- 1 18. A device as defined in Claim 17, wherein said
- 2 wakeup signal is only generated by said processor
- 3 following the receipt of radio signals from any other
- 4 device which are received by said radio receiver if
- 5 the unique second identifier received from said at
- 6 other device has not previously been stored in said
- 7 memory.
- 1 19. A device as defined in Claim 16, wherein the time
- 2 interval between periodic generation of said wakeup
- 3 signal and periodic transmission of radio signals from
- 4 said device is a function of the time since the last
- 5 receipt of a unique second identifier from another
- 6 device.
- 1 20. A device as defined in Claim 15, wherein said
- 2 processor is further arranged to send any unique
- 3 second identifiers received from said other devices
- 4 from said memory of said device to a remote device in
- 5 response to a request from said remote device.

MW/1163838 -35-